



Memorandum

U.S. Department
Of Transportation

**Federal Railroad
Administration**

Date: June 21, 2001

Reply to Att. of: **MP&E 01-02**

Subject: Guidance for Inspection for Locomotive Draft Gear Pocket Center Sill Connection Plate
Cracks During Daily and 92-Day Periodic Inspections

From: Edward W Pritchard
Acting Director, Office of Safety Assurance and Compliance

To: Regional Administrators, Deputy Regional Administrators,
Motive Power & Equipment Specialists and Inspectors

Recently, there have been a number of locomotives discovered with cracks in the center sill connection plate in the area where the draft pocket is secured to the under frame of the locomotive. These cracks are developing in the plate steel, not in the securement welds (see figures 1 & 2). When the cracking progresses far enough, the coupler face drops and the backside of the draft pocket is forced up between the center sills. Catastrophic failure results in separation of the draft unit from the locomotive (see figure 3).

While all draft gear pocket connection plates should be inspected, particular attention should be placed on EMD GP-38 model locomotives, where a number of cracked plates have been recently been found.

These cracks can be observed during the daily inspection, but are best seen when a locomotive is placed over an inspection pit or on raised track during the 92-day periodic inspection. At least two Class I railroads have issued additional instructions to do a better inspection of draft gear pocket the area during 92 day periodic inspection.

The current locomotive safety standard [49 CFR 229.23] requires “that at each periodic inspection a locomotive shall be positioned so that a person may safely inspect the entire underneath portion of the locomotive”. It is at this time that a thorough visual inspection of the draft pocket area should be performed.

FRA field inspectors should review 92-day periodic inspection procedures with shop craft employees at railroad facilities during routine inspections. They should make inspection forces on Class I, Regional, and Short Line Railroads aware of the problem and keep the condition in mind during routine inspection of the locomotives.

The cracks are visible to the naked eye as shown in the photographs. Photograph 1&2 were taken with an idler truck under the locomotive, but cracks can be seen with standard locomotive trucks in place.

Fig. # 1 Crack at the rear connection of the draft gear pocket extending past piping.



Fig. # 2 Crack in the connection plate along side draft gear pocket.



Fig. # 3. Catastrophic failure resulting in separation of the draft unit from the locomotive.



#